

Translation

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

|  |  |  |                       |
|--|--|--|-----------------------|
| Applicant's or agent's file reference<br><b>P00033725-P0</b>                 | FOR FURTHER ACTION   |  | See Form PCT/IPEA/416 |
| International application No.<br><b>PCT/JP2004/002958</b>                    | International filing date ( <i>day/month/year</i> )<br><b>08.03.2004</b> | Priority date ( <i>day/month/year</i> )<br><b>17.03.2003</b> |                       |
| International Patent Classification (IPC) or national classification and IPC |  |  |                       |
| <p>Applicant<br/><b>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.</b></p>         |  |  |                       |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of **4** sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
- a.  (*sent to the applicant and to the International Bureau*) a total of **3** sheets, as follows:
- sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- b.  (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- Box No. I Basis of the report
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

|   |                                   |
|---|-----------------------------------|
| Date of submission of the demand        | Date of completion of this report |
| Name and mailing address of the IPEA/JP | Authorized officer                |
| Facsimile No.                           | Telephone No.                     |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/002958

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- international search (Rule 12.3 and 23.1(b))
  - publication of the international application (Rule 12.4)
  - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- the international application as originally filed/furnished
- the description:  
pages 1-4, 6-18 as originally filed/furnished  
pages\* 5 received by this Authority on 11.11.2004  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the claims:  
nos. 2-28 as originally filed/furnished  
nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
nos.\* 1 received by this Authority on 11.11.2004  
nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the drawings:  
sheets 1-21 as originally filed/furnished  
sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
- the description, pages \_\_\_\_\_
  - the claims, nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- the description, pages \_\_\_\_\_
  - the claims, nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/JP2004/002958

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement**

**1. Statement**

|                               |        |                                  |     |
|-------------------------------|--------|----------------------------------|-----|
| Novelty (N)                   | Claims | 1-28                             | YES |
|                               | Claims |                                  | NO  |
| Inventive step (IS)           | Claims | 10, 12, 17, 19, 24, 25           | YES |
|                               | Claims | 1-9, 11, 13-16, 18, 20-23, 26-28 | NO  |
| Industrial applicability (IA) | Claims | 1-28                             | YES |
|                               | Claims |                                  | NO  |

**2. Citations and explanations (Rule 70.7)**

Document 1: JP 9-88837 A (Matsushita Refrigeration Co.),  
31 March 1997

Document 2: JP 11-341860 A (Matsushita Electric  
Industrial Co., Ltd.), 10 December 1999

Document 3: JP 2002-330599 A (Matsushita Electric  
Industrial Co., Ltd.), 15 November 2002

Document 4: JP 2001-37281 A (Matsushita Electric  
Industrial Co., Ltd.), 9 February 2001

Document 5: JP 2000-78880 A (Calsonic Corp.), 14 March  
2000

Document 6: JP 2002-125387 A (Sanyo Electric Co., Ltd.),  
26 April 2002

Document 7: JP 9-285177 A (Fujitsu General Limited), 31  
October 1997

Document 8: JP 7-87782 A (Toshiba Corporation), 31 March  
1995

The inventions set forth in claims 1 and 8 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. Document 1 (paragraphs [0064] to [0067]; fig. 2) sets forth a relation between motor speed and torque, wherein the drive region as a DC motor and the drive region as a

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International application No.  
PCT/JP2004/002958

Box No. V

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

synchronous motor are disclosed, and it can be inferred from document 1 that at a predetermined torque, it is possible to operate at a higher engine speed by driving as a synchronous motor rather than driving as a DC motor. Meanwhile, it is common general technical knowledge in the field of motor control that a motor operates more efficiently when driven as a DC motor rather than when it is driven as a synchronous motor. It would therefore be easy for a person skilled in the art to conceive of driving a motor as a DC motor at low engine speed not exceeding a predetermined engine speed, and as a synchronous motor at high engine speed exceeding a predetermined engine speed, in the motor driving method and driving device set forth in document 1.

The inventions set forth in claims 2 to 7, 9, 11, 13 to 16, 18, 20 to 23 and 26 to 28 do not involve an inventive step in the light of documents 1 to 8 cited in the international search report, as stated in the written opinion dated 29 June 2004.

The inventions set forth in claims 10, 12, 17, 19, 24 and 25 involve an inventive step in relation to the documents cited in the international search report, as stated in the written opinion mentioned above.